

REMARKS

Reconsideration is respectfully requested.

Claims 1-18 are pending in this application. Claim 1 is amended.

The Examiner indicates that he did not review the non-English language documents cited in the information disclosure statement. Applicant respectfully submits that the non-English language documents cited in the information disclosure statement were properly cited in accordance with the procedure allowed in the MPEP. Under U.S. practice, the International Search report with the X, or Y indication of relevance of the documents is sufficient, and English translations of the documents are not needed. The information disclosure statement was submitted with such an International Search report, and therefore, the documents should be considered. Applicant respectfully requests notice that the documents have been properly considered.

The Examiner rejects claims 1-4 as being anticipated by Nozawa et al, U.S. Patent 6,395,434 under 35 U.S.C. §102(e). Applicant respectfully traverses. Claims 1-4 and 10-13 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Hashimoto et al (U.S. 5,538,816) or by Mitsui (U.S. 5,804,337) or Mitsui (U.S. 5,849,439). Claims 5-9 and 14-17 are rejected 35 U.S.C. §103(a) as obvious over Hashimoto et al (5,538,816), Mitsui (5,804,337) or Mitsui (5,849,439) mentioned above, in view of Mitsui (U.S. patent 6,037,083). Claim 18 is rejected as obvious in view of all the documents above used to reject claims 5-9 and 14-17, with the addition of Mohri et al (U.S. 5,576,123).

Applicant respectfully traverses.

Claim 1 is amended herein to indicate that tantalum is a main metal component and that silicon is not contained. Support for the amendment to claim 1 herein is based on Example 1, for instance, in the specification, which is described beginning on page 14, line 19. It is apparent from the manufacturing procedure that the mask and the blank according to the present invention do not contain silicon.

As shown in the table on the attached sheet, silicon is contained in each of the cited references 1 (Nozawa et al U.S. 6,395,434), 3 (Mitsui U.S. 5,804,337), 4 (Mitsui U.S. 5,849,439) and 5 (Mitsui U.S. 6,037,083).

In contrast, silicon is not contained in the present invention. The absence of silicon provides the advantage that the product has high resistance to chemicals.

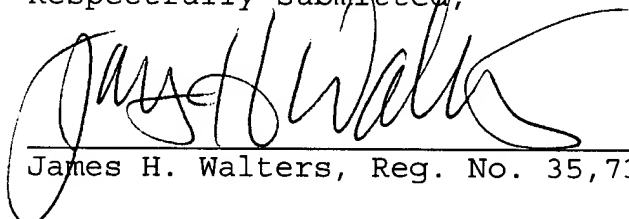
The reference 2 (Hashimoto et al U.S. 5,538,816) contains chromium as main component. Compared with the product containing Cr as a main component, the product containing Ta as main component is superior in transparency and resistance to chemical. When the product has high transparency, it is helpful in attaining shorter wavelength in exposure. The reference 2 containing Cr as main component can be used only up to i-line exposure. In contrast, the product containing Ta as main component according to the present invention is advantageous in that ArF excimer laser light of short wavelength can be used.

In view of this, it is respectfully submitted that applicant's claims are allowable.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

In light of the above noted amendments and remarks, this application is believed in condition for allowance and notice thereof is respectfully solicited. The Examiner is asked to contact applicant's attorney at 503-224-0115 if there are any questions.

Respectfully submitted,

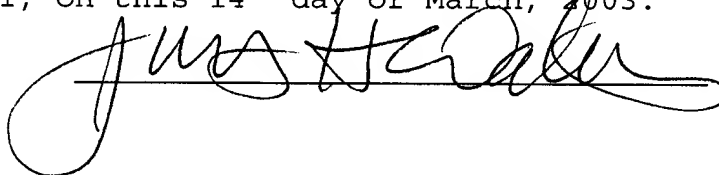


James H. Walters, Reg. No. 35,731

Customer number 802
DELLETT AND WALTERS
Suite 1101
310 S. W. Fourth Avenue
Portland, Oregon 97204 US
(503) 224-0115
DOCKET: A-398

Certificate of Mailing

I hereby certify that this correspondence is being deposited as first class mail with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on this 14th day of March, 2003.



MARKUP VERSION TO SHOW CHANGES MADE

In the Claims:

1. (Amended) A halftone phase shift photomask, comprising tantalum as a main metal component on a transparent substrate, and [a halftone phase shift film] containing oxygen, carbon and nitrogen, and not containing silicon, which photomask has a multilayer structure comprising at least two or more different layers.

		Ta	O	C	N	Pd	Si	H	M (Metal)	Cr	Mo
	The present invention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
1	US 6,395,434		<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
2	US 5,538,816	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				(including Ta)	<input type="radio"/>	
3	US 5,804,337		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>
4	US 5,849,439		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>				<input type="radio"/>
5	US 6,037,083		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>			<input type="radio"/>	<input type="radio"/>